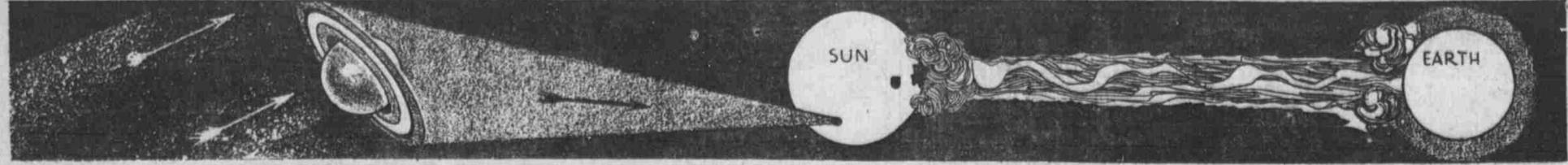


HOW THE RINGS OF THE PLANET SATURN AFFECT THE WEATHER ON OUR EARTH



The Diagram Shows How, According to Professor Turner's Theory, the Meteor Swarm of the Leonids Strikes the Meteoric Rings of the Planet Saturn. Portions of the Rings Are Torn Away by the Contact and Plunge into the Sun, Causing the Sun Spots. These Sun Spots Set up a Vast Magnetic Disturbance, Which Is Communicated to Earth and Causes Great Variations of Temperature and Storms on Our Planet.

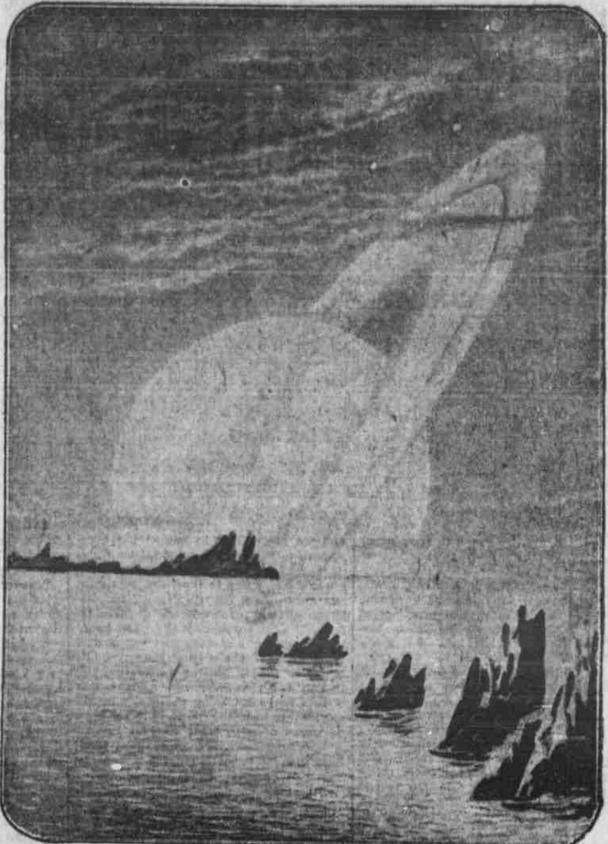
Professor Turner's Interesting Theory of Whirling Masses of Meteorites That Make Sun Spots and So Fill the Universe with Storm-Producing Electricity

An entirely new theory has been put forward regarding sunspots. This theory is that they are fragments of the rings of Saturn driven into the sun by the meteors called Leonids. Sunspots are of vital importance to our existence on earth. They reach a period of maximum growth once in every eleven years. This period is always accompanied by great storms on earth and other disturbances of the weather. Sunspots are dark patches on the surface of the sun of irregular form, but having a tendency to be round. They vary greatly in size, but are frequently from 50,000 to 100,000 miles in diameter. They present an extraordinary appearance to the astronomer viewing them through the telescope. Concerning the nature of the dark central part of the spot, only guesses can be made, but the edges present the most fantastic appearance conceivable. Sometimes they are walls of flame hundreds of miles long reaching out from the surface of the sun. As a general rule, periods of maximum sunspot development are marked by cold weather, while those of renewed development are remarkable for electric storms. We are now in a period of developing sun spots, and this would account for the mild weather we have had for the past several winters. By the same rule we should have many electric storms during the coming year. All astronomers, from Kepler to the present day have been entirely at sea regarding the exact nature of sunspots. Some have conjectured that they are holes in the sun's surface caused by colossal explosions from the in-

terior, while others have argued that they were places where the sun's fires were falling. The latter hypothesis would explain why we experience cold weather on earth at the time of maximum sunspots. This uncertainty regarding sunspots lends great interest to the new theory of their nature. It is put forward by Professor Turner, of the Royal Society of England, who furnishes abundant astronomical and mathematical arguments in support of it. Professor Turner suggests that a small portion of the great meteoric swarm known as the Leonids has become detached from the main shower, owing to gravitational action of Saturn on some favorable occasion. This subsidiary swarm travels in an orbit which brings it periodically into violent collision with Saturn. At such recurrent events, the particles collide with the particles constituting Saturn's rings, which are in themselves nothing more than a great meteoric swarm. In one part of the Rings, the fragments move with equal and opposite velocities, and collisions would impart rest in both opponents, and henceforth they must inevitably fall into the sun. These fragments from Saturn's Rings appear to plunge headlong into the solar furnace at the rate of 400 miles a second, giving rise to the well-known phenomena of sun spots. Chinese and other records during the last 2,000 years substantiate this theory that, following a collision between Saturn and the meteoric swarm, there is manifested an epoch of large and numerous sunspots. Professor Turner adds that although the hypothesis is supported by past and present records, to consider it as finally established would be premature. Under this theory three of the

most marvellous phenomena in the whole universe are brought into relation with one another. They are the sunspots, the swarm of shooting stars, called Leonids, and the ring and moons of Saturn. The Leonids are a mass of meteorites with an orbit reaching 600,000,000 miles into space, that approach the solar system, our earth, Saturn and the other planets, once in thirty-three years. It is then that the collision with Saturn's ring must take place. Saturn is surrounded by enormous flat, luminous rings, which form one of the greatest wonders of the heavens. The rings are about 175,000 miles in diameter, and the average estimate of their thickness is 75 miles. An artist has depicted the amazing sight which Saturn would present when seen from one of its ten moons, Japetus. This moon is about the size of our earth's moon, but it has the remarkable distinction of having an atmosphere. The variation of light and the formation of clouds have been observed on Japetus. Proctor and other astronomers have argued that it is probably the abode of living creatures. What must be the consternation of these creatures when they see the rings of the parent planet Saturn suddenly checked by collision with the flight of the Leonids and then torn away to form colossal spots on the sun! It is possible that the inhabitants of Japetus are water creatures better able to endure terrific disturbances in their atmosphere than air dwellers can be. In any case, it is certain that the eyes of the inhabitants both of Saturn and Japetus must witness scenes of a grandeur and sublimity more sublime and appalling than any that come within our intimate vision on earth.

One of the Vast Spots with Whirling Vortex, 50,000 Miles Wide, Now Appearing on the Sun.



How Saturn and Its Rings Appear from One of Its Ten Moons, Japetus, Which May Contain Life.

Memoirs of Mendel Beilis Victim of Russian Persecution Writes His Own Story for The Bee Readers

PART III.
Full of vodka and with their passions excited to the utmost they did not know what they were doing, and they seemed more like wild animals. Then all the windows of a house were smashed, they would break open the doors, rush in like a set of maniacs, steal all they could carry and break the rest. They would hurl pianos to the street from the fifth and sixth story windows and yell with delight when they heard them smash to atoms below, not caring if anyone were killed. Their chief joy was when they found drink in a house. They would then drink themselves to a state of mad frenzy and then the real orgy would commence. The most horrible tortures would be inflicted on any Jew they found. When they had killed enough men to satisfy themselves they would begin on the women. Any woman so unfortunate as to fall into their hands would be brutally outraged. Often before they left her they would cut off her breasts and otherwise mutilate her and then shriek with delight. Little girls were outraged in dozens, many before the eyes of their parents, death often coming as a swift release from their tortures. They drove nails into the women's nostrils. They seized little children out of their mothers' arms and tore them into pieces. Every act of this kind was accompanied by cries such as "Hurrah! Down with Jewry! Stupid! Liberal! Interfered with our fun!" These orgies of slaughter and outrage continued for three or four days. Police in the streets made no attempt to interfere with the mobs or stop their work in any way. They would stand and watch them enter a jeweler's shop, steal all they wanted and throw the rest into the streets, and made no the least attempt to protect him. They would only see if there was anything left for themselves and laugh when they saw the man, half killed if not dead already, thrown out into the street. Only on the fourth day, when even this mob was satisfied with blood and slaughter; when their human sacrifices were complete; when dozens of women had been outraged and thousands more left homeless and penniless; when many children had been left orphans, and when scarcely a Jewish family had not lost one or more members, and when the streets were actually running in blood; only then did the word go forth and the police take steps to interfere and stop the massacres. And oh! Those awful days afterward. The days when we collected and buried our dead. The days when nothing but weeping and lamentations were heard. I shall never be able to forget them. Even my two years' imprisonment and my own terrible suffering and torture did not awaken in me the feelings of these times. But yet I was one of the few who recovered. I often wonder what can be the feelings in the hearts of other Jews, those who lost father, mother, wife and child. In my case only my brother was hurt.

We managed to pull him around, but his wife and two children, who for three days lay hidden in a cold, dark cellar, all took pneumonia, and were ill long afterward. We escaped lightly. When this was over they left us alone for a time. However, it became harder than ever to live in Kiev. Police demands increased. The ordinary people became more unkind to us, and life became more of a burden. They did not do us bodily harm, but in the streets members of the "Black Hundred" often spat upon us and cursed us, and we were only safe from insult indoors. I had settled down to do the best I could for my children, as I expected to end my days in Kiev. One of my wife's sisters had gone to America, but I had no money to do so, and it seemed to me that I must just go working always, and hoped that those coming after me would have a better time than I had. I did nothing that could bring me into conflict with the police, and I wanted nothing more than to be left alone and be allowed to live quietly.

"You know, Mendel, I am certain, in spite of the fact that Vera is telling everybody that Jews killed the boy Yuchinsky, he was actually killed in her house. I know that just before his death Yuchinsky quarreled with the Cheberiak children, who were his playmates, and during the row he threatened to tell the police about the gang of thieves of which the woman Cheberiak was the leader." I was startled at this news. It was the first time that it really came home to me that Jews were being accused of murder. Looking back now, it is sad to recall that my friend, Zacharchenko, who became so ardent a supporter of wine, that it got on his brain, and he died before my trial. By his death I lost one of my best witnesses. He died with the words on his lips: "Poor Yuchinsky! Unfortunate Mendel!" I heard nothing more for several weeks and then I noticed that a number of spies—members of the secret police—disguised as tramps, were beginning to pay visits to my house and to question my

children. When they did not get answers they wanted they boxed the boys' ears until they shrieked with pain, at the same time shouting at them, "You lie!" Soon after this friends came to me and told me that Vera Cheberiak was going around the town telling everyone that I murdered the boy. I did not know what to do. It was so much in fear of the police that I was afraid to go to them and ask them to stop her saying this. But I was not afraid. I had done no harm. I just went on with my work as usual. Then one day, the local prosecuting attorney, with five policemen, paid me a visit. The prosecuting attorney, looking at the door, said to me: "You are a very orthodox Jew, are you not? Then where is your 'Miasna'?" (This is a tallman that almost every orthodox Jew has in his house). I was embarrassed, and replied: "I am afraid that I am not a very or-



BEILIS IN HIS UNDERGROUND DUNGEON WAITING TRIAL.



RIVETING SHACKLES ON BEILIS IN PRISON.

Suddenly I heard a loud knocking at the door. I was afraid and trembling. My wife and children were even more frightened and began to cry. Never in the twelve years we had lived in the house had we been aroused at night in this way before. For the sake of the children I pulled myself together and tried to quiet them. Then I ran and opened the door. Trembling, I looked up and saw eight men, policemen and gendarmes, in uniform, with long swords and revolvers. Before I could utter a word they seized hold of me. "Are you Mendel Beilis?" asked one of them. "Yes," I added. "Then you are arrested." My wife, who had followed me to the door, gave one shriek and fell to the ground in a dead faint. They would not let me comfort her. "Won't you allow me to dress?" I asked.

They gave me permission. While putting on my clothes I noticed that all the money I had was 75 kopecks. "Do you want to give the money to your wife?" I was asked. She had no money—that I knew. I glanced at her. She was still lying on the floor in a faint. I went up to her and put the coin in her hand. They would not let me kiss her or the children, or bid them farewell. I was dragged into the street, and under a guard of soldiers with drawn swords, we went on foot to the police station. When I had gone my rooms were searched, but the only thing the police found were Jewish books, my passport, and my soldier's certificate. My head was full of sorrowful thoughts as I walked to the station, and I was nearly heartbroken. I could not walk very rapidly. A knock on my back from one of the soldiers brought me back to the terrible reality of my position. In a rough voice I was ordered to walk in the road, and not on the pavement. On the way I met a Christian who was employed at the brick works. He began to cry when he saw what had happened to me. "Don't lose courage, Mendel," I remember him saying, "we know you are innocent, and will pray to God for you." It was quite two hours before we reached the police station. I was at once put into a dark cell without even a seat in it. I touched one of the walls; it was cold and damp. A shiver ran through me. I could not sleep, and spent the night pacing up and down my cell. I shall never forget those hours. At last the morning came, and I was summoned to the office of the chief of police. He spoke to me very kindly, gave me a cup of tea, and in a very gentle voice said to me: "Come, Mendel, tell me what you know about this affair." Of course, I did not touch the tea. I cried bitterly, until the floor became wet with my tears. At last I pulled myself together and answered: "I do not know why I have been arrested." It was then I learned, for the first time, that I was suspected of murdering the boy Yuchinsky, and I called on God to witness my innocence. At this he got into a very bad temper, shouted: "You to Siberia, where you will learn not to lie. Tell me the truth, or you will be sorry." "Your Excellency," I replied, "I am in your hands. I shall not lie. You can do what you want with me. You can hang me, kill me, send me to Siberia, but I will not tell a lie. I cannot tell you anything about this murder. I know nothing of it—I swear it!" Disappointed in his attempt to obtain a confession from me, he went out, slamming the door and swearing hard. I was left back to my cell and, to my horror, I heard the voice of my poor son David. I could hear him weeping bitterly and shouting at the top of his voice, "Let me go home; let me go to my father!" I licked at the door. I banged my head against the walls until the blood began to flow. I went nearly mad in my desperation. Soon after the chief of police came again to my cell. I became more terrified than ever. "You see, Beilis," he said, "how your little boy lies. Vera Cheberiak's son says that your children and he were playing with Yuchinsky in the brick works, and your boy says this is not true. He is a big liar. That is why we have arrested him." I could not reply to this lie. My only answer was tears for my poor little son. I was threatened again, and then left alone. Later dinner was brought to my cell, but I could not touch it. I only implored the woman who brought it to do a favor to a poor downtrodden father and give the food to my boy, and tell him his father had sent it to him. "Eat it yourself," was her reply. "Don't worry. The boy has had something to eat." She must have been touched by my words, for she added, "Although I am a Christian, I swear I pity you. I am sorry for your poor little boy." During the morning I had found in my pocket a twenty kopeck piece. I took it out and offered it to her. She refused to take it and went away crying. Next morning, looking through the bars of my cell window, I saw poor little David walking, handcuffed, up and down the court yard of the station, and with policemen on either side of him, carrying drawn swords. I began to cry and pull the bell in my cell. As it is always taken for granted that the prisoner wants to confess, the chief of police himself, accompanied by policemen, came to my cell to hear what I had to say, and take it all down on paper. But I had no confession to make. "I implore you, I beg you, pity my poor unfortunate child," I cried to them. "Remember! if he dies in this prison then his blood is upon your head. Do what you like to me, but I pray you to set him free." The chief of police was very disappointed. He had quite expected my confession. But he turned a deaf ear to my entreaties and went away laughing. About an hour and a half later I was overjoyed to hear that David had been set free. Perhaps the prayers of a father had touched the heart of the chief of police, and caused him to change his mind. Next day I was heartbroken to see both Finka and David standing guarded in the court yard. The police had fetched them again to make more inquiries. "It was a terrible day. Heavy rain was beating down on their heads and I could hear the poor children crying: 'Mother, mother!' They were kept there for hours. But the same woman who, the day before, had cheered me up, saw them and went to the governor, and told him it was a pity to keep these poor children the whole day without food and without taking their exercise. The governor was entertaining his friends, and had forgotten about the boys. He just glanced at her and said, 'Send them home.'" (Continued on Page Eleven.)